

Borst 13-7

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Applicant(s): S.C. Borst et al.  
Case: Borst 13-7  
Serial No.: 09/803,247  
Filing Date: March 9, 2001  
Group: 2661  
Examiner: Robert W. Wilson

I hereby certify that this paper is being deposited on this date with the U.S. Postal Service as first class mail addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Signature: *[Handwritten Signature]*

Date: March 8, 2006

Patent No.: 7,006,466  
Issued: February 28, 2006

Certificate

MAR 17 2006

Title: Dynamic Rate Control Methods and Apparatus for Scheduling Data Transmissions in a Communication Network

of Correction

TRANSMITTAL LETTER

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Attn: Certificate of Corrections Branch

Sir:

Submitted herewith are the following documents relating to the above-identified patent:

- (1) Request for Certificate of Correction for PTO Mistake Under 37 C.F.R. §1.322(a); and
- (2) Certificate of Correction.

There is no additional fee due in conjunction with this Certificate of Correction. In the event of any non-payment or improper payment of a required fee, the Commissioner is hereby authorized to charge or to credit **Ryan, Mason & Lewis, LLP Deposit Account No. 50-0762** as required to correct the error.

Respectfully submitted,

*[Handwritten Signature: Joseph B. Ryan]*

Date: March 8, 2006

Joseph B. Ryan  
Reg. No. 37,922  
Attorney for Applicant(s)  
Ryan, Mason & Lewis, LLP  
90 Forest Avenue  
Locust Valley, NY 11560  
(516) 759-7517



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**Issued: February 28, 2006**

Title: Dynamic Rate Control Methods and Apparatus for Scheduling  
Data Transmissions in a Communication Network

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REQUEST FOR CERTIFICATE OF CORRECTION OF  
PATENT FOR PTO MISTAKE UNDER 37 C.F.R. §1.322(a)

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Attn: Certificate of Corrections Branch

Sir:

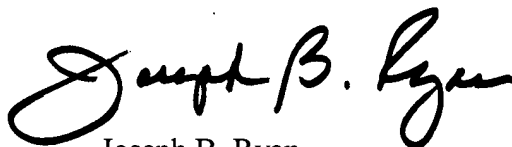
In accordance with 37 C.F.R. §1.322(a), Applicants hereby request the issuance of a Certificate of Correction with respect to errors in the above-identified patent.

The errors are set forth on the proposed Certificate of Correction (PTO-1050) submitted herewith.

The errors are Patent Office mistakes, namely, repetitive cites of certain references, typographical errors and an omitted claim. The omitted claim is claim 20 as presented in the "Amendment and Response to Office Action" filed July 5, 2005, and has been renumbered as claim 21 on the proposed Certificate of Correction. Accordingly, this certificate should be issued pursuant to 37 C.F.R. §1.322(a).

It is believed that there is no additional fee due in conjunction with this Request for Certificate of Correction. In the event of any non-payment or improper payment of a required fee, the Commissioner is hereby authorized to charge or to credit **Ryan, Mason & Lewis, LLP Deposit Account No. 50-0762** as required to correct the error.

Respectfully submitted,

A handwritten signature in black ink, reading "Joseph B. Ryan". The signature is fluid and cursive, with the first name "Joseph" being the most prominent part.

Date: March 8, 2006

Joseph B. Ryan  
Reg. No. 37,922  
Attorney for Applicant(s)  
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Locust Valley, NY 11560  
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## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 1 of 2

PATENT NO. : 7,006,466

APPLICATION NO.: 09/803,247

ISSUE DATE : February 28, 2006

INVENTOR(S) : S.C. Borst et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On pages 1-2, in OTHER PUBLICATIONS, delete redundant second references to each of the following:

U.S. Appl. No. 09/517,659, filed Mar. 3, 2000, S. Stolyar et al., "Method of Packet Scheduling, With Improved Delay Performance, for Wireless Networks."  
A. Bedekar et al., "Downlink Scheduling in CDMA Data Networks," Proc. IEEE Globecom '99, pp. 1-32, 1999.  
P. Bender et al., "CDMA/HDR: A Bandwidth-Efficient High-Speed Wireless Data Service for Nomadic Users," IEEE Communications Magazine, vol. 38, pp. 70-77, 2000.

In the Specification:

Col. 7, line 7, between the commas in the equation please insert --....--.

Col. 7, line 53, between the commas in the equation please insert --....--.

Col. 9, line 37, between the commas in the equation please insert --....--.

Col. 11, line 62, between the commas in the equation please insert --....--.

Col. 13, line 44, please delete "0".

Col. 16, line 46, between the parentheticals please insert -- = --.

Col. 17, line 33, in the SNR (dB) column of the table before "30.0" please insert -- - --.

Col. 17 line 33, in the Rate (bits) column of the table before "30" please delete "-".

Col. 17, line 64, between the commas in the equation please insert --....--.

MAILING ADDRESS OF SENDER (Please do not use customer number below):

Joseph B. Ryan  
Ryan, Mason & Lewis, LLP  
90 Forest Avenue  
Locust Valley, New York 11560

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**Page 2 of 2

PATENT NO. : 7,006,466  
APPLICATION NO.: 09/803,247  
ISSUE DATE : February 28, 2006  
INVENTOR(S) : S.C. Borst et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the Claims:

Claim 9, col. 21, line 58, delete "Musers" and insert --M users--.

Insert the following claim:

--Claim 21

An apparatus for scheduling data transmissions in a communication network, the apparatus comprising:

a base station having at least one processing device associated therewith, the at least one device being operative to identify for a given transmission interval a particular user from among a plurality of users requesting data transmissions, the particular user being identified as a maximum-rate user after application of coefficients of a revenue vector to corresponding feasible rates of the plurality of users, the revenue vector being determined in an iterative manner using an adaptive algorithm; and to schedule a data transmission of the particular user for the given transmission interval;

wherein the adaptive algorithm starts from an arbitrary initial revenue vector and iteratively adjusts the coefficients of the revenue vector to compensate for observed deviations between actual and target throughput, such that the deviations are reduced over time and the revenue vector converges to an optimal revenue vector.--

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*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*